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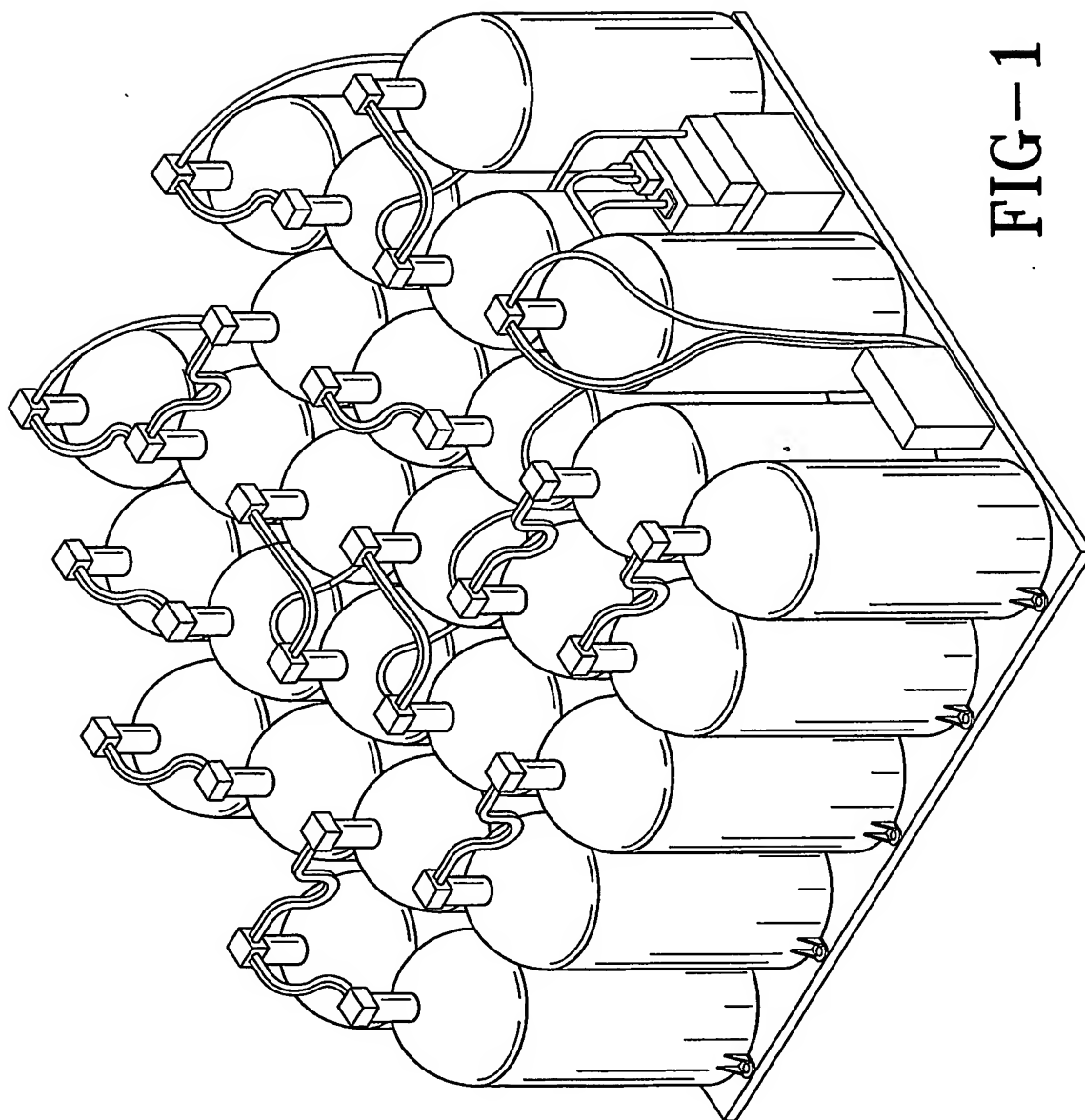


FIG-1

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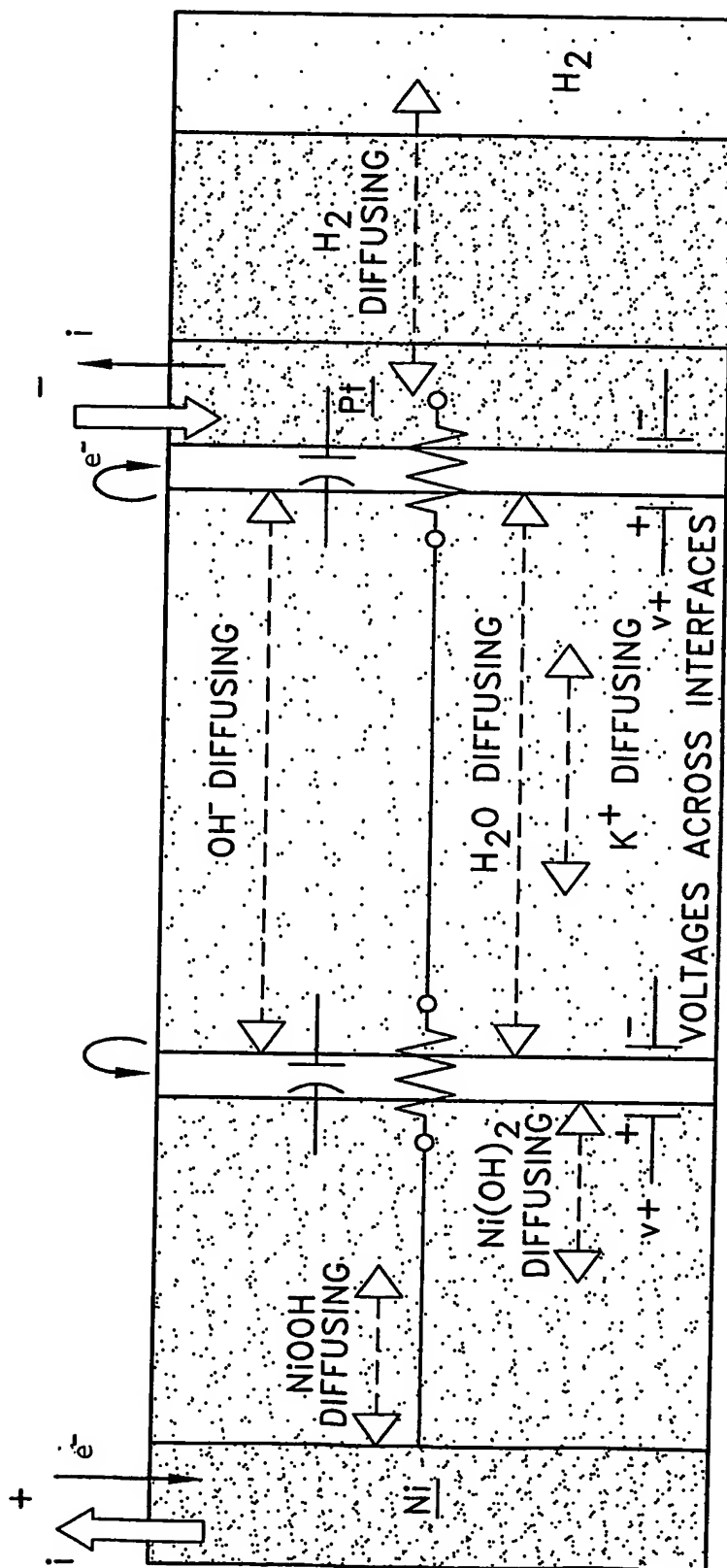


FIG-2

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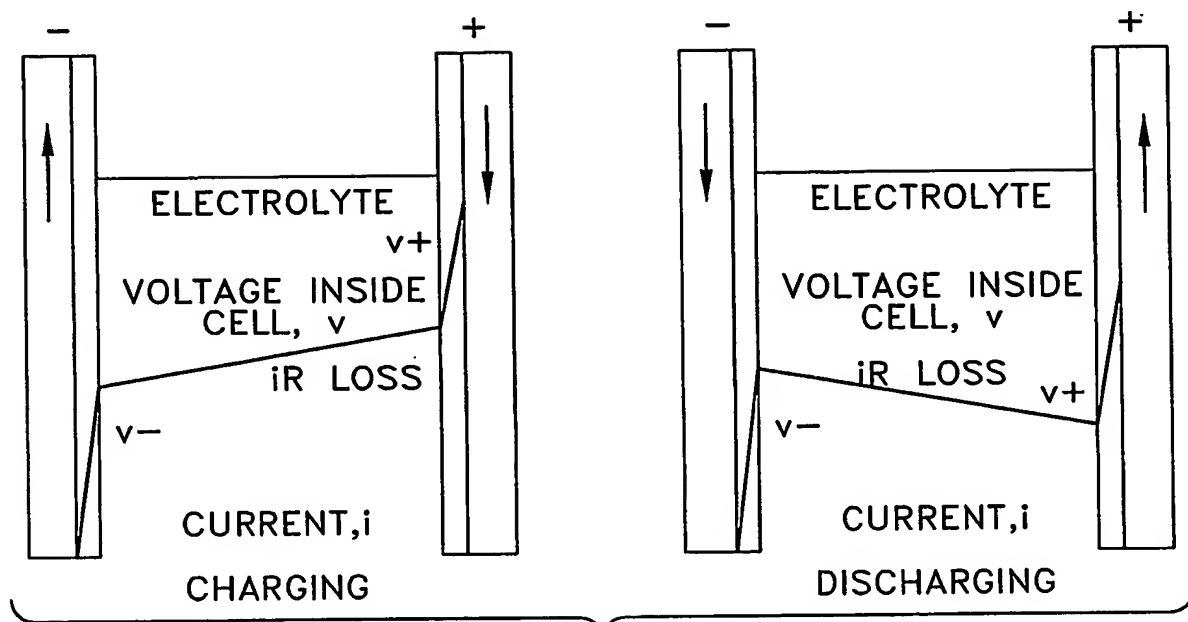


FIG-3

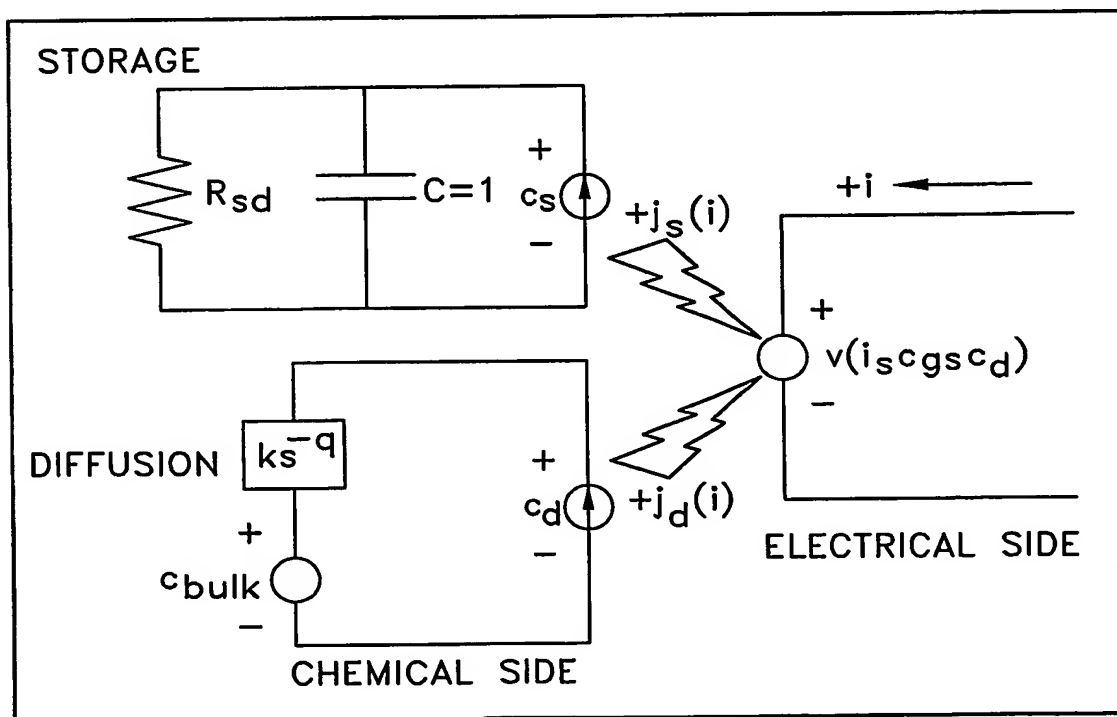


FIG-4

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voltage vs time for least squares identified model, cycle 500

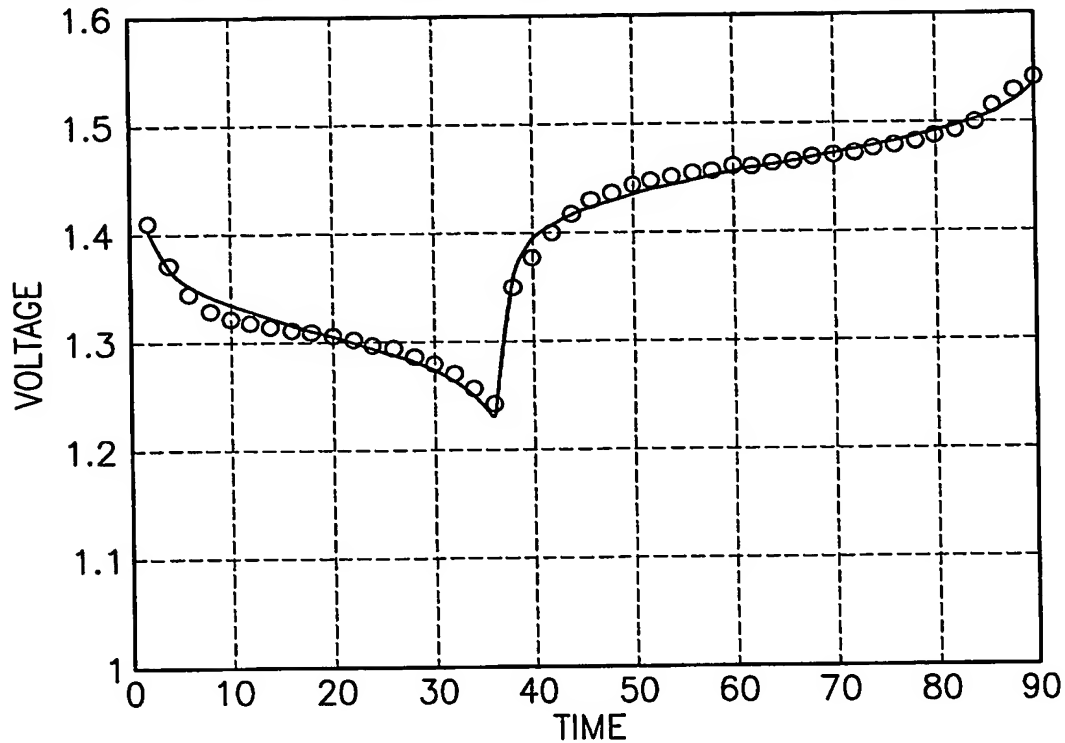


FIG-5

voltage vs time for least squares identified model, cycle 10000

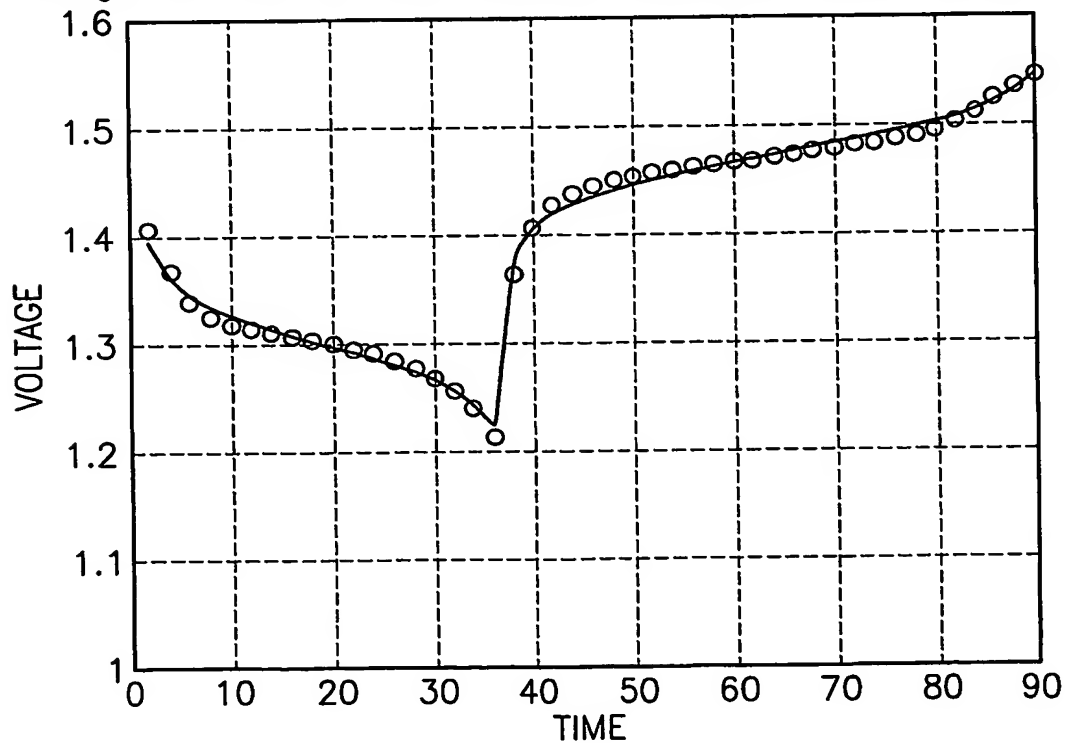


FIG-6

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voltage vs time for least squares identified model, cycle 40000

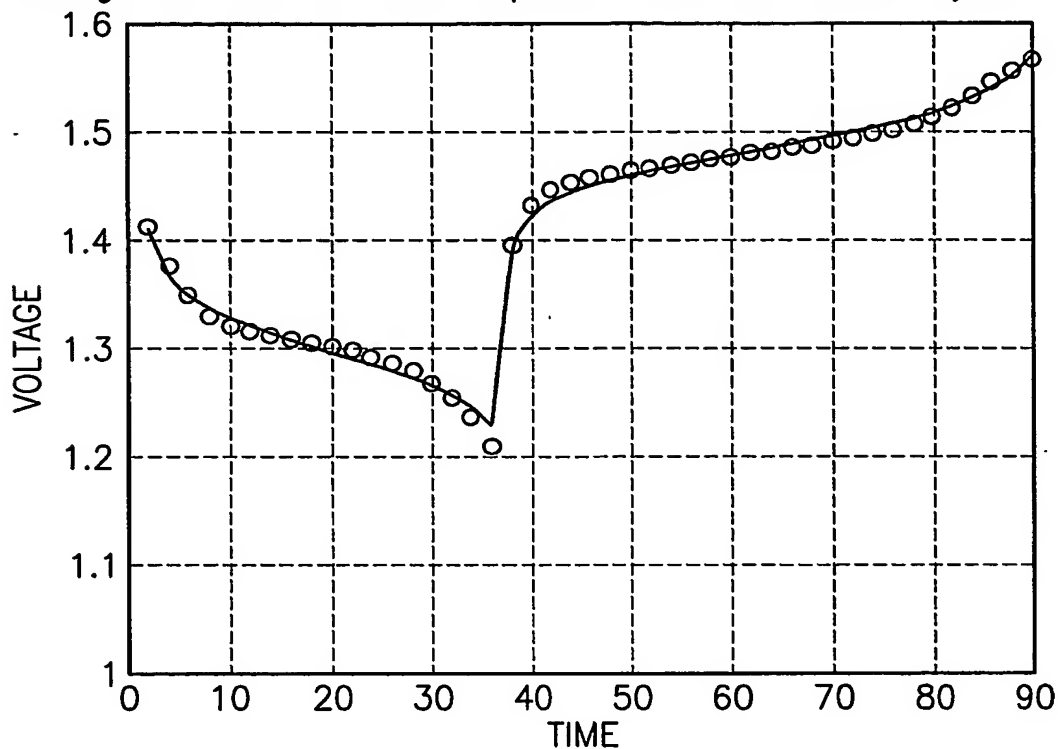


FIG-7

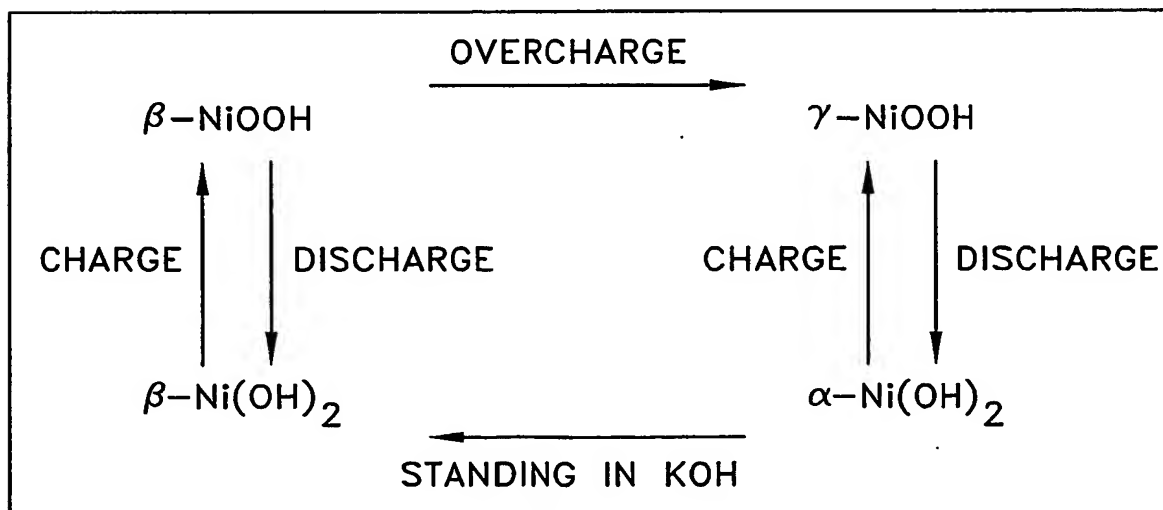


FIG-8

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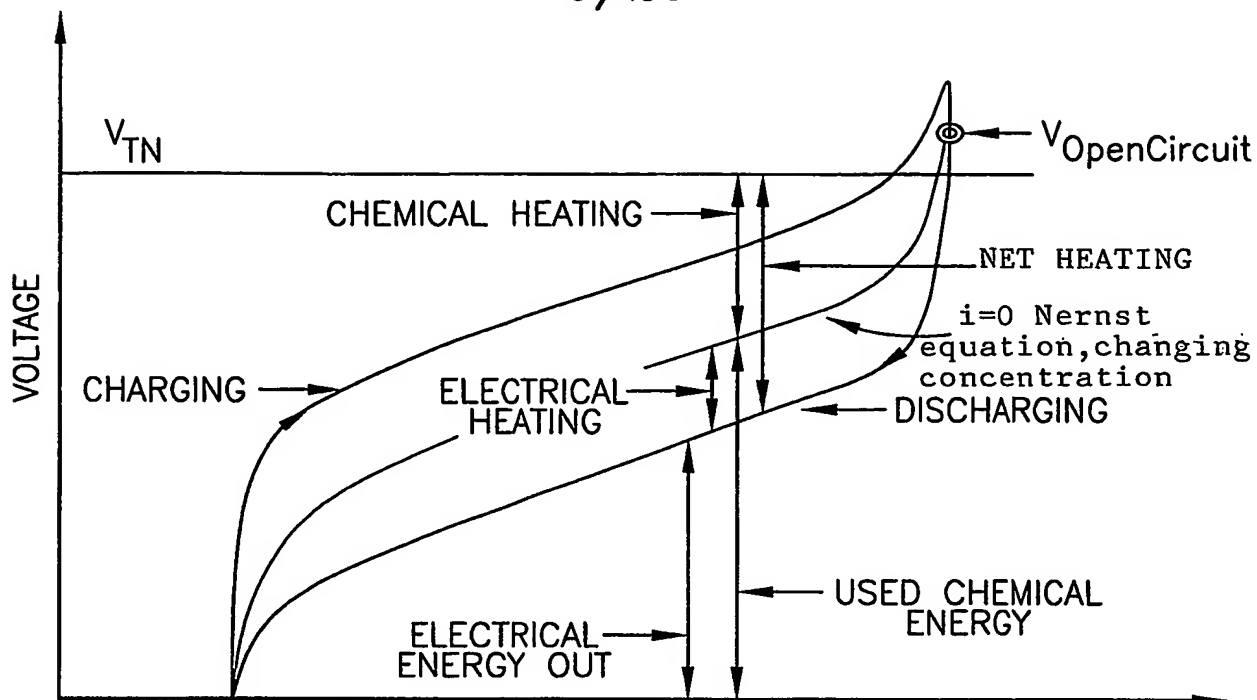


FIG-9

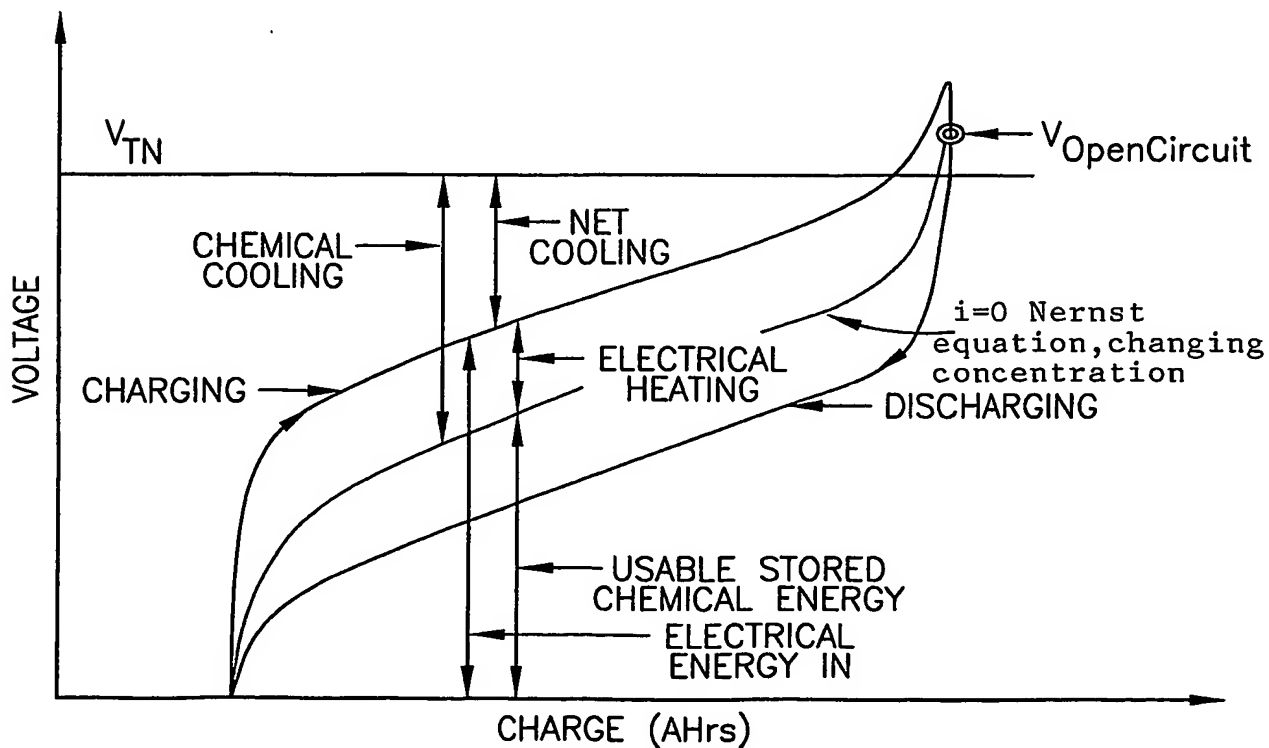


FIG-10

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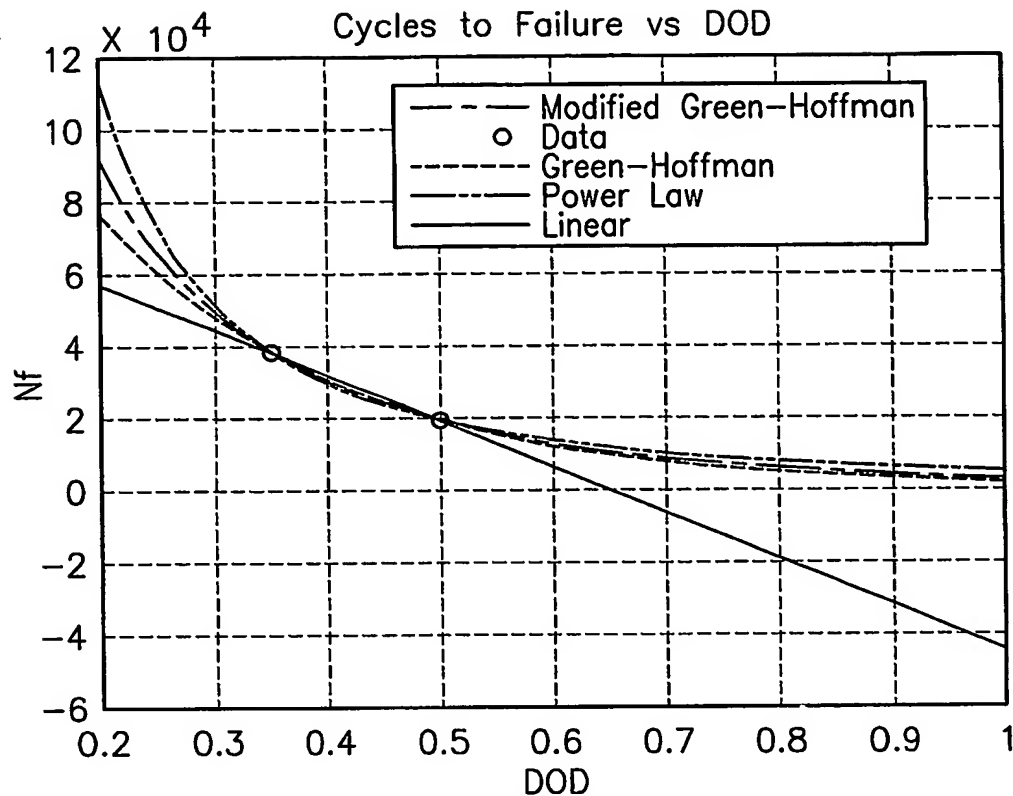


FIG-11

```

Load previous best
Set j=1
  Guess u(jT)
  Initialize simulation
  Main simulation loop
    Derivative function evaluations
    Numerical integration (Euler, T=1)
    Damage rate calculation
    Integrate damage rate
  End main loop
  Include final state error into Performance Measure
  Change u(jT) using gradient search and repeat until optimal
Increment j and repeat
Reset j=1 and repeat until optimal
Store present best
    
```

FIG-12

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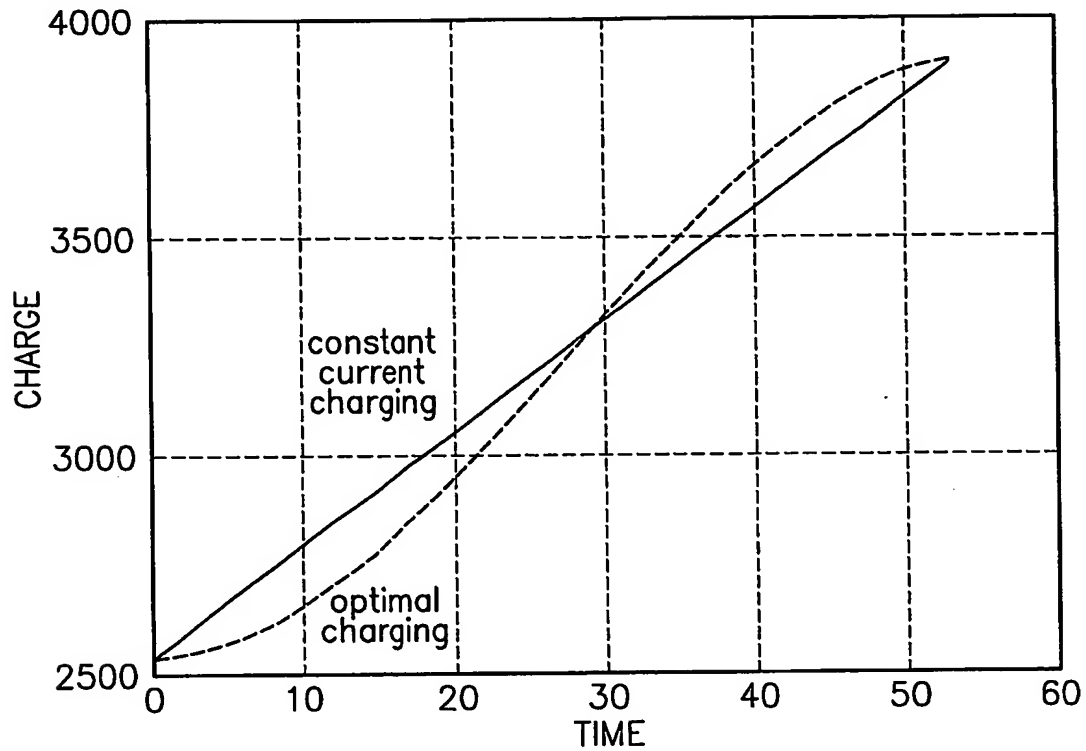


FIG-13A

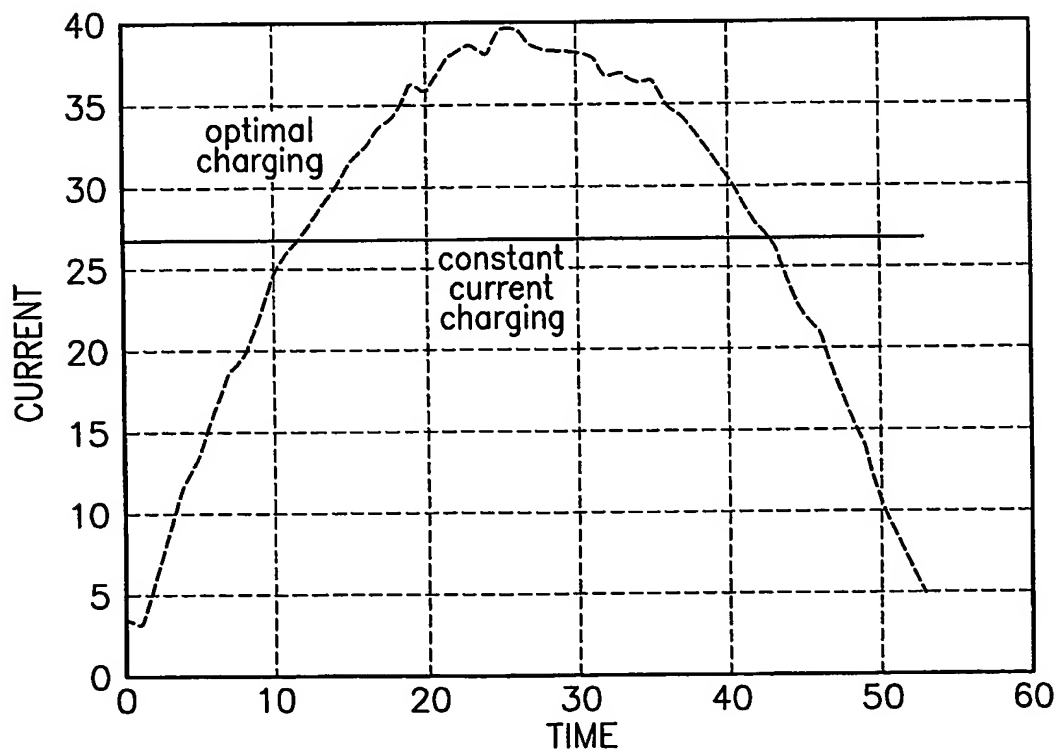


FIG-13B

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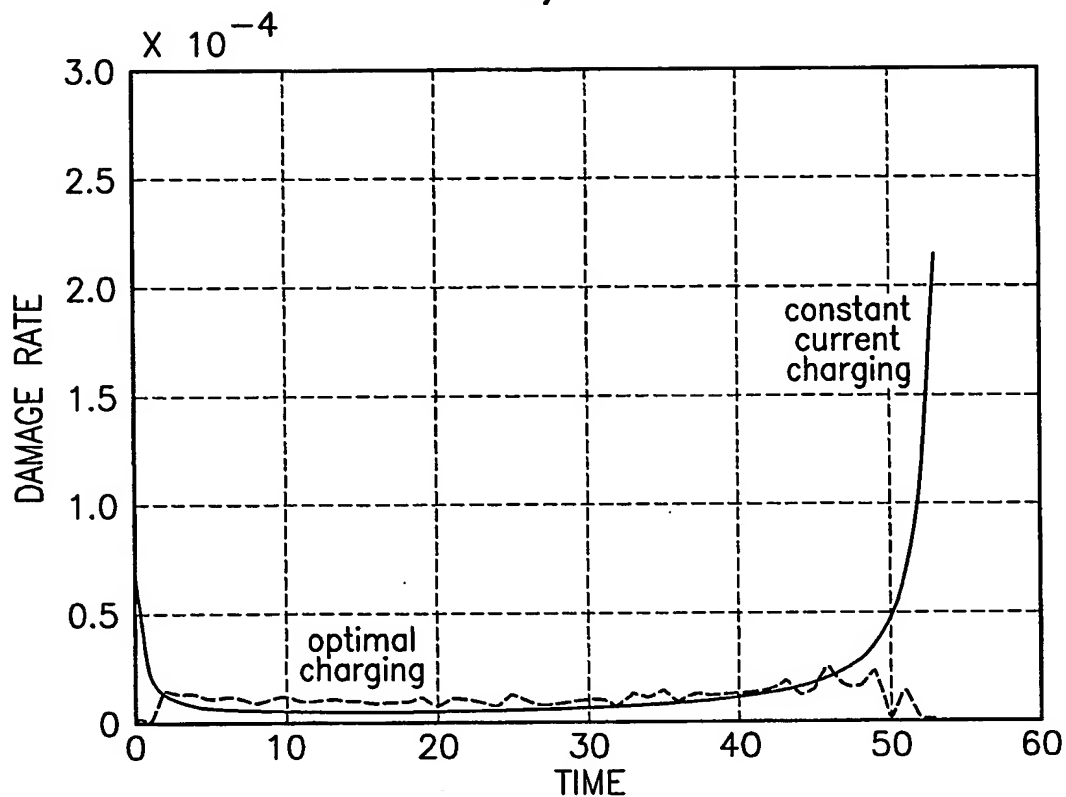


FIG-13C

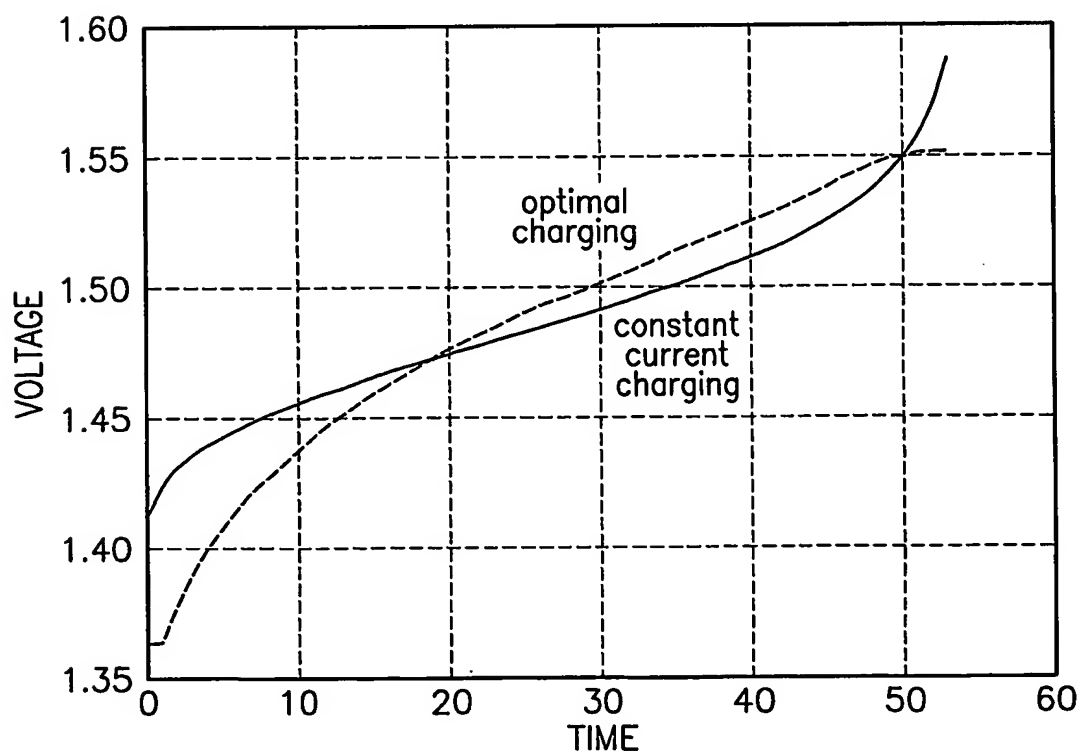


FIG-13D

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```
Load previous best
  Guess u(t) function coefficients
  Initialize simulation
    Main simulation loop
      Derivative function evaluations
      Numerical integration (Euler, T=1)
      Damage rate calculation
      Integrate damage rate
    End main loop
    Include final state error into Performance Measure
  Change u(t) function coefficients using gradient search and repeat until optimal
Store present best
```

FIG-14

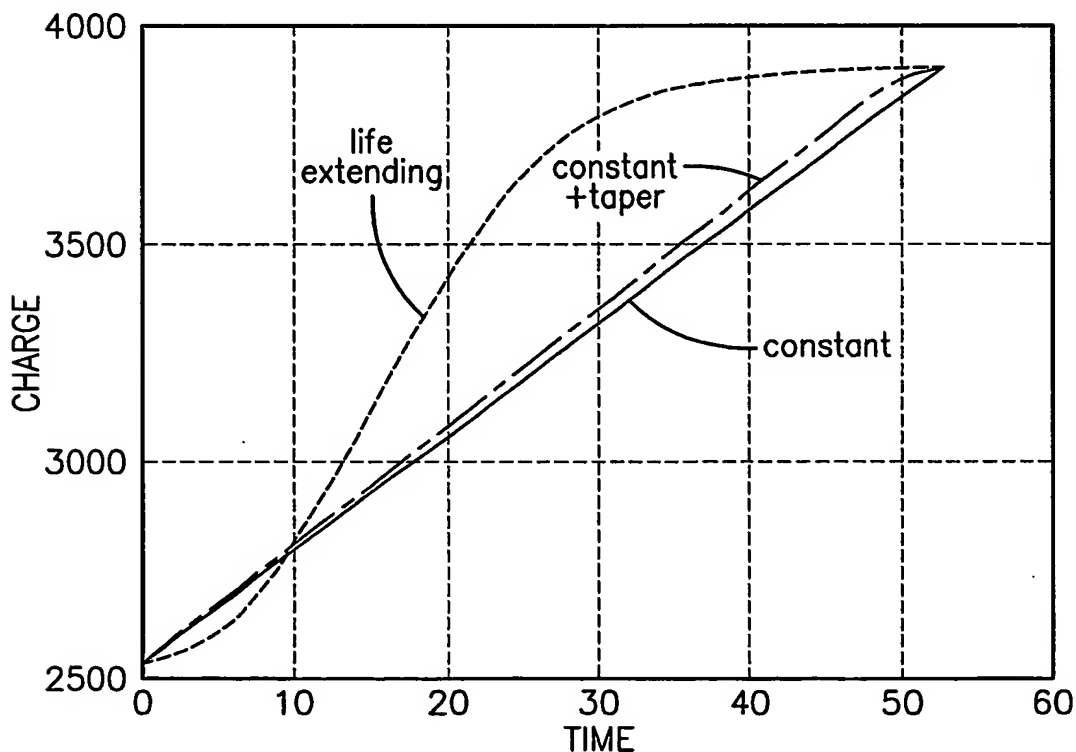


FIG-15A

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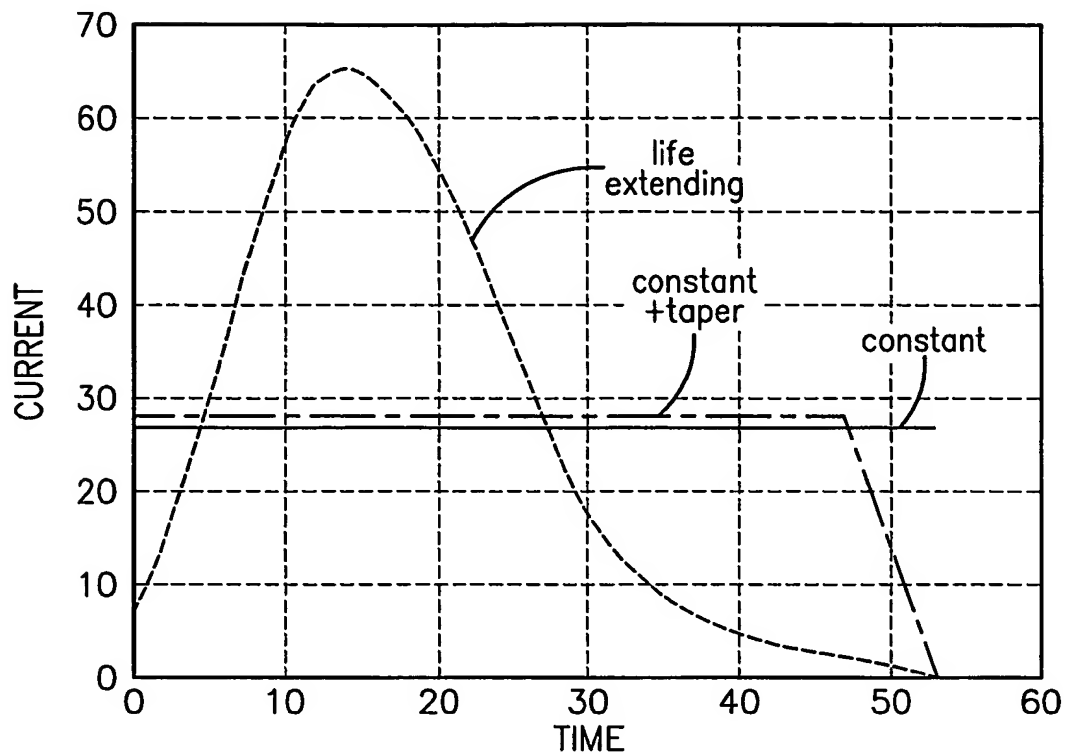


FIG-15B

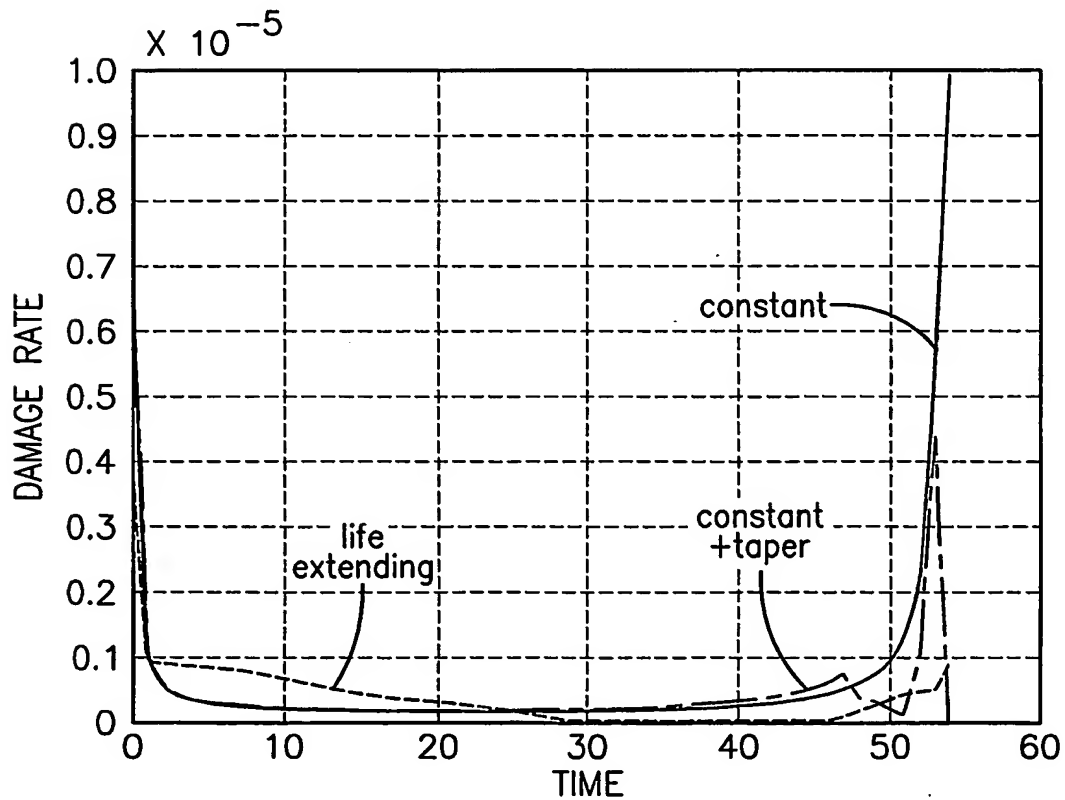


FIG-15C

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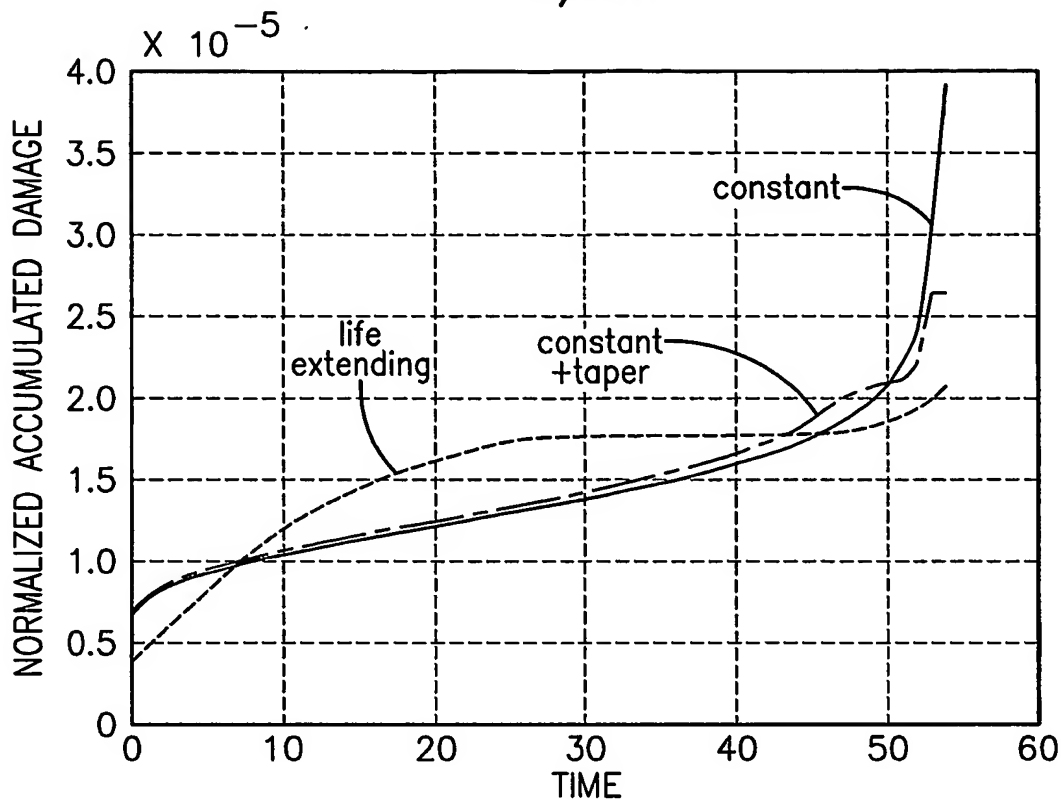


FIG-15D

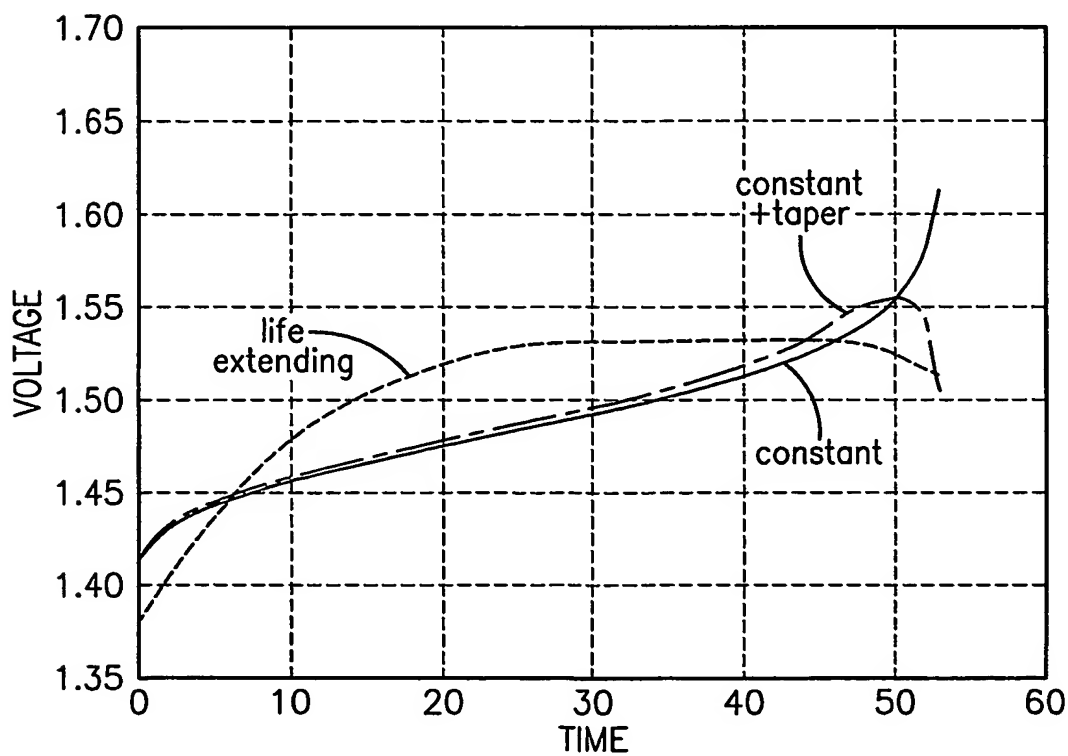


FIG-15E

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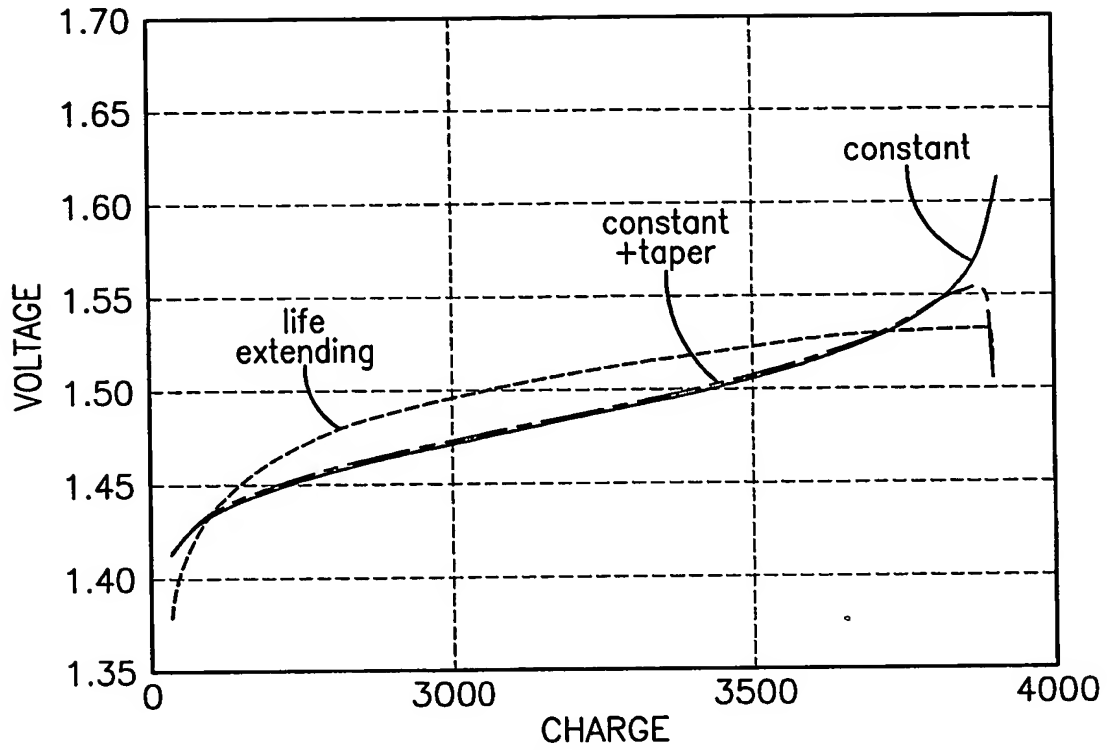


FIG-15F

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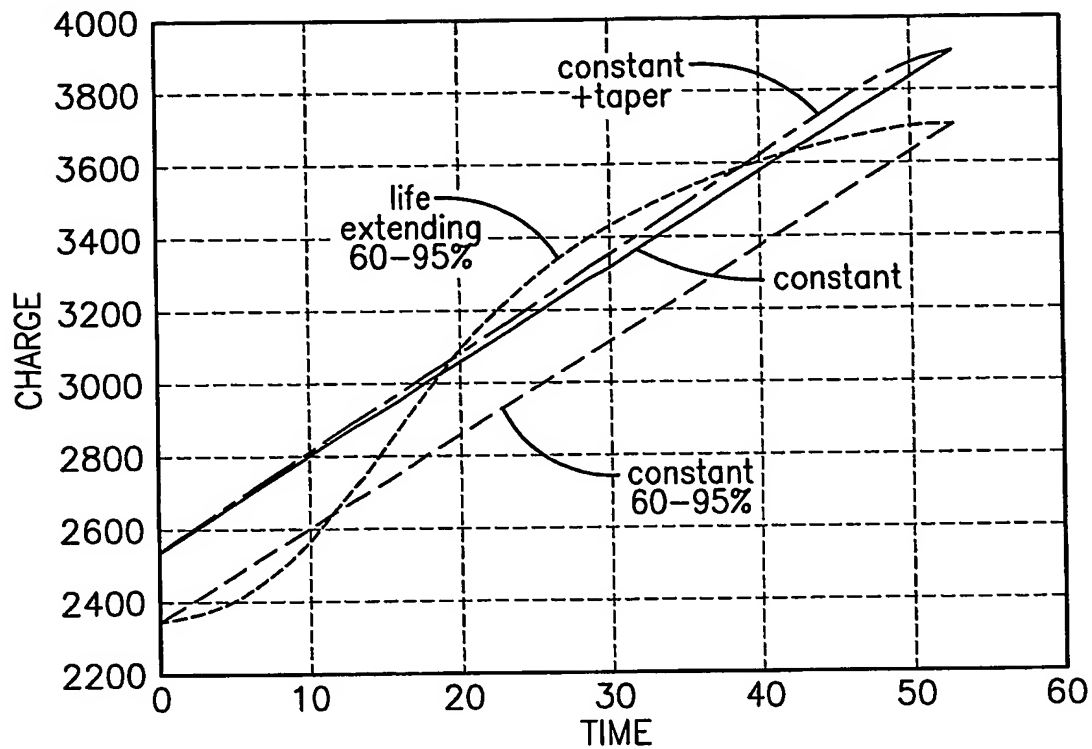


FIG-16A

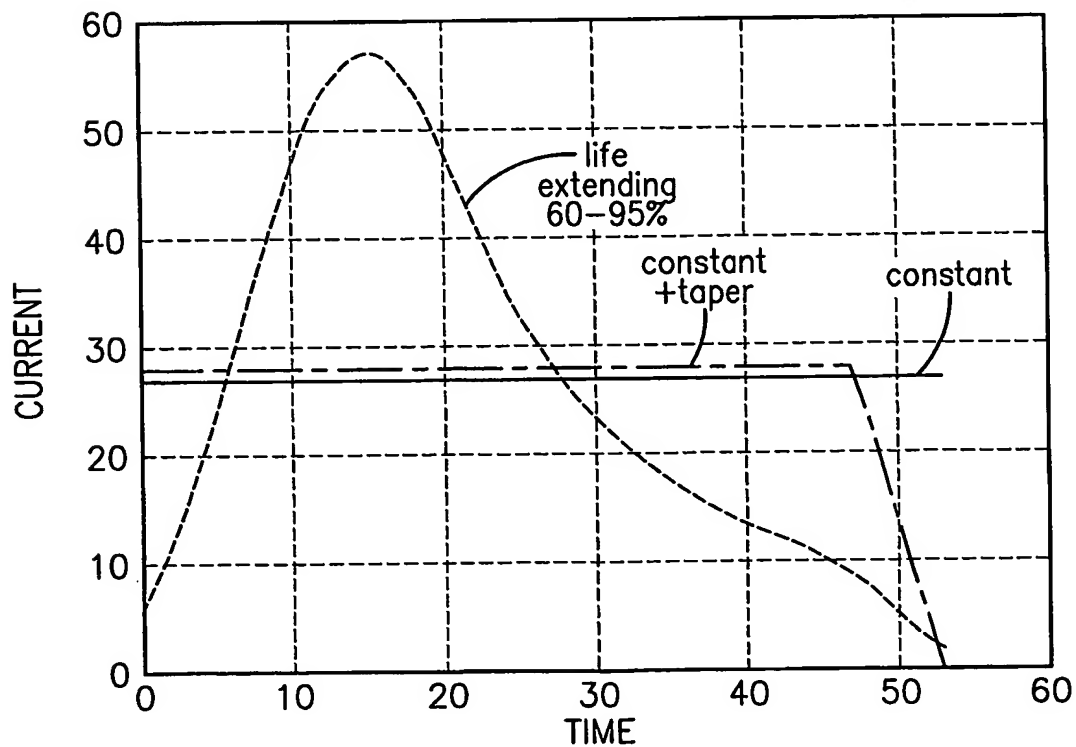


FIG-16B

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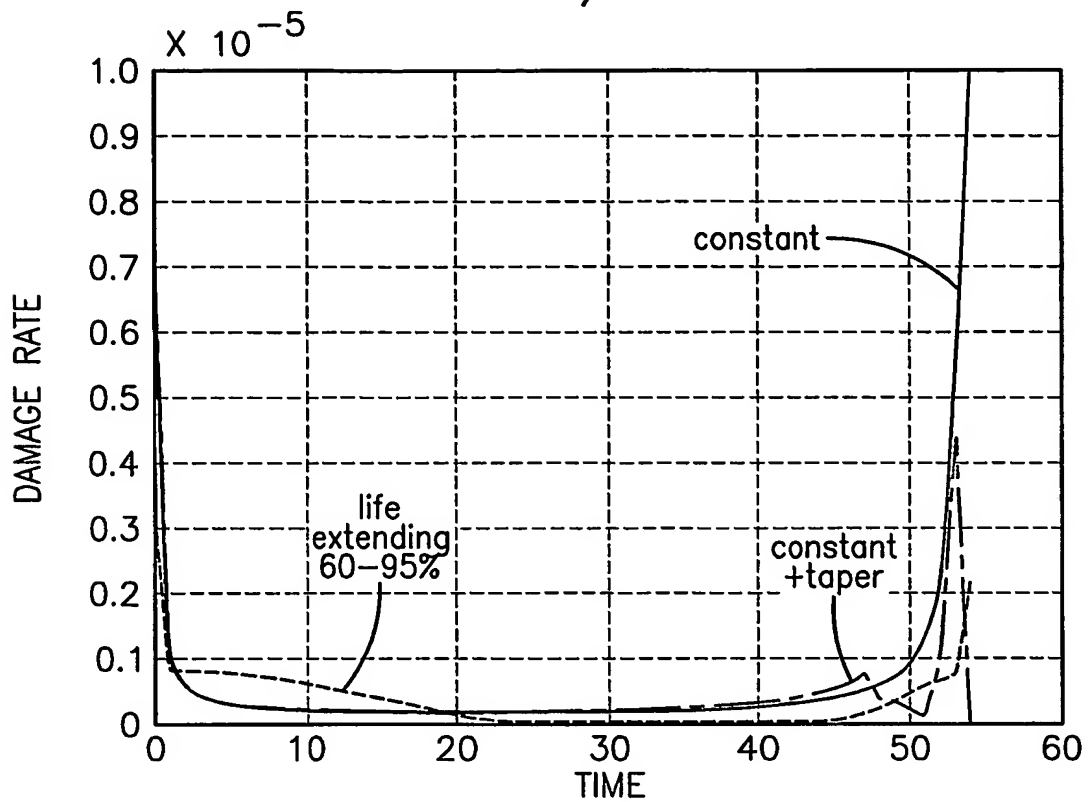


FIG-16C

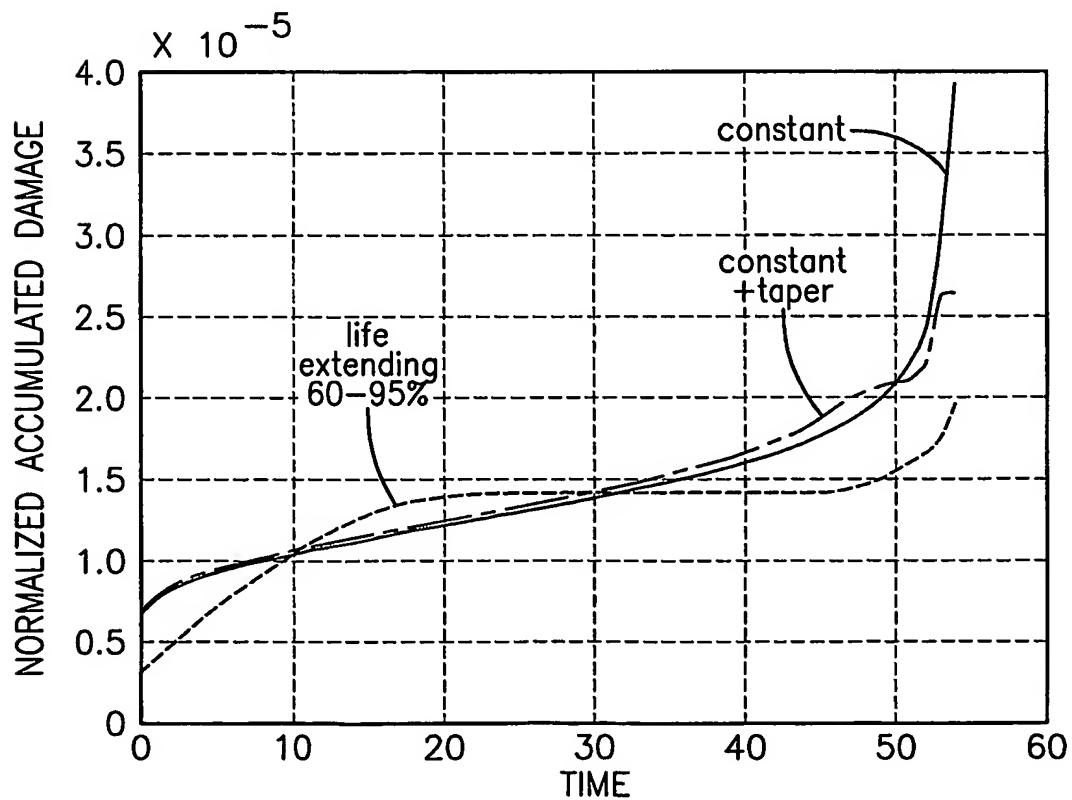


FIG-16D

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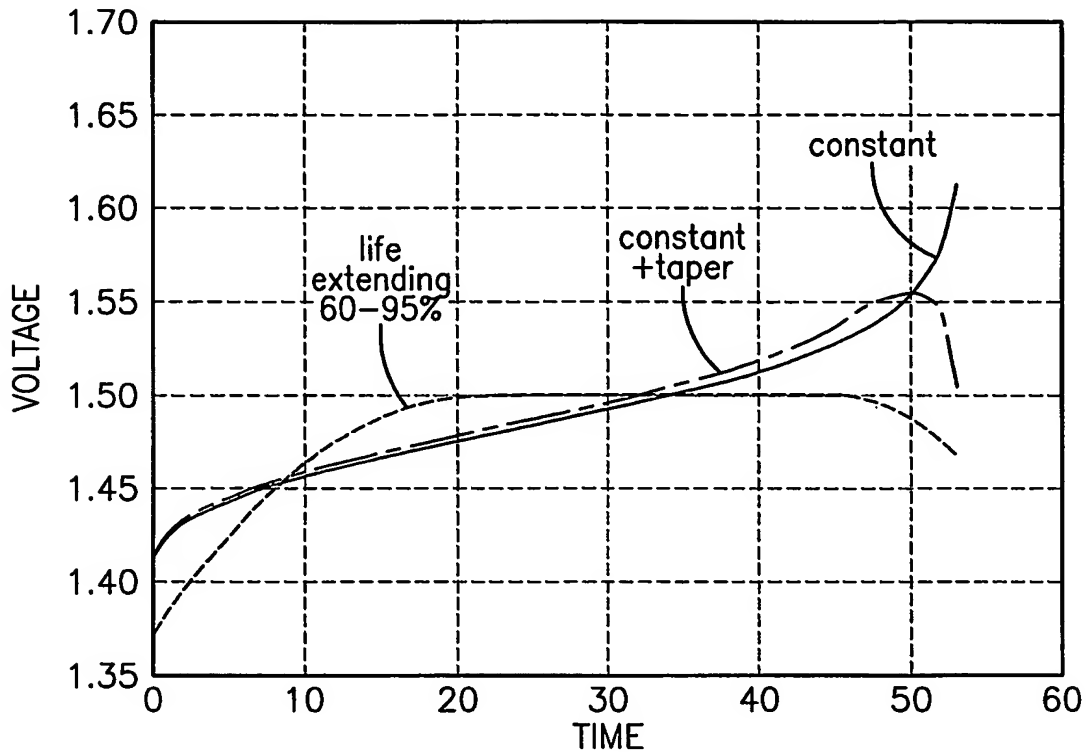


FIG-16E

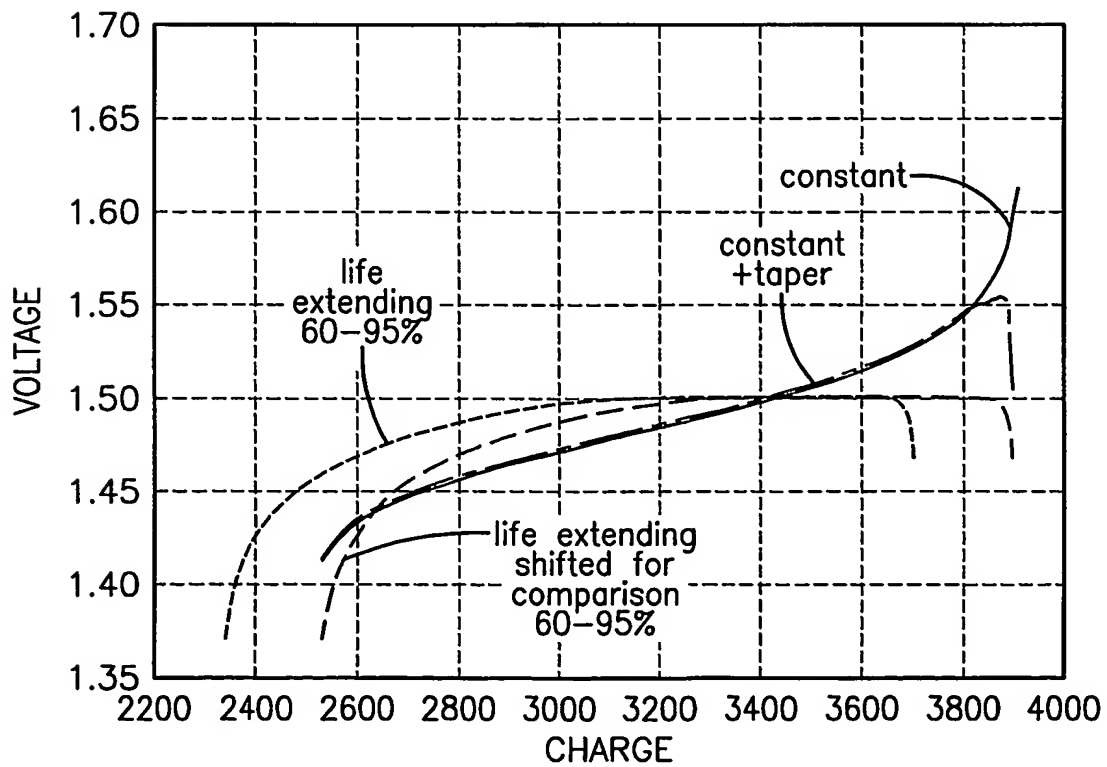


FIG-16F

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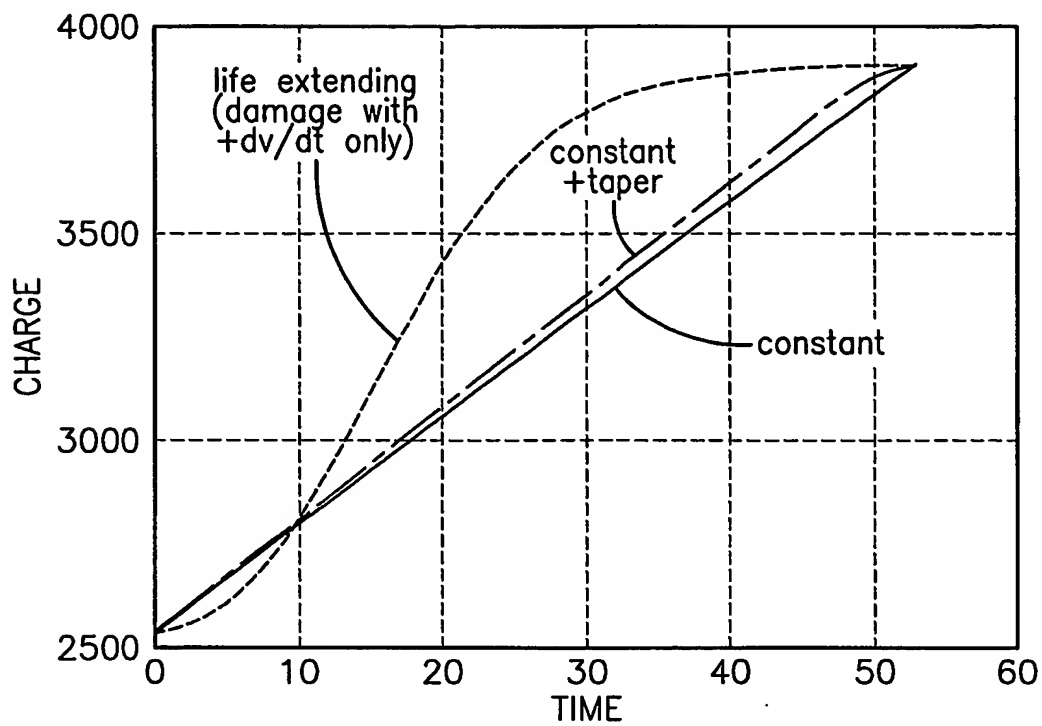


FIG-17A

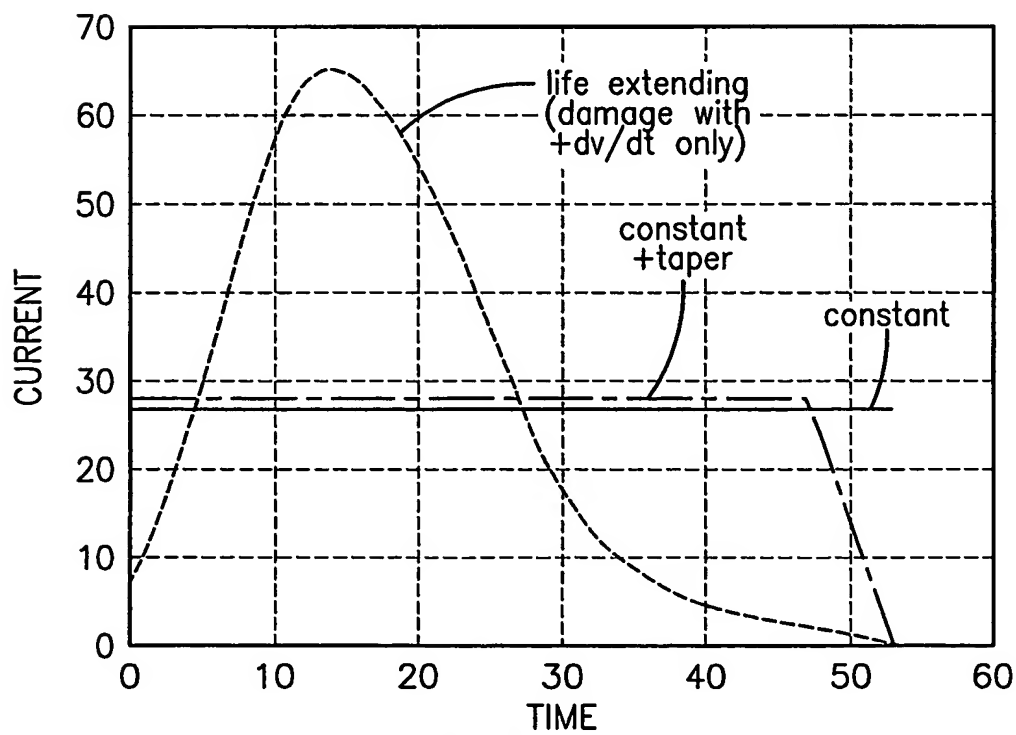


FIG-17B

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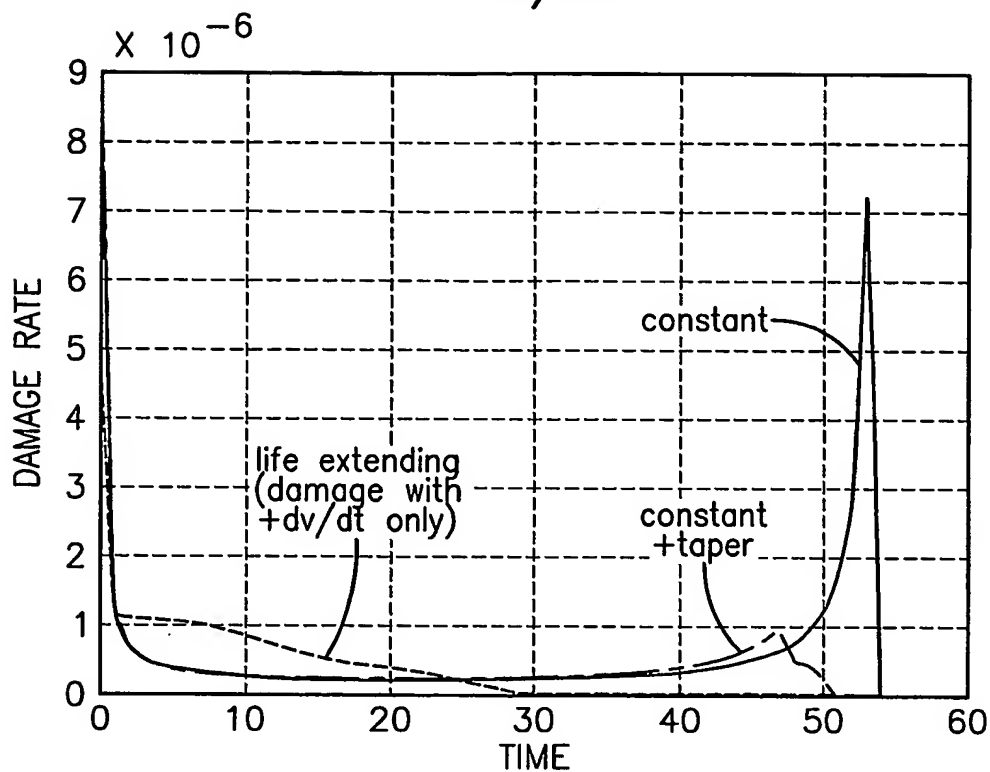


FIG-17C

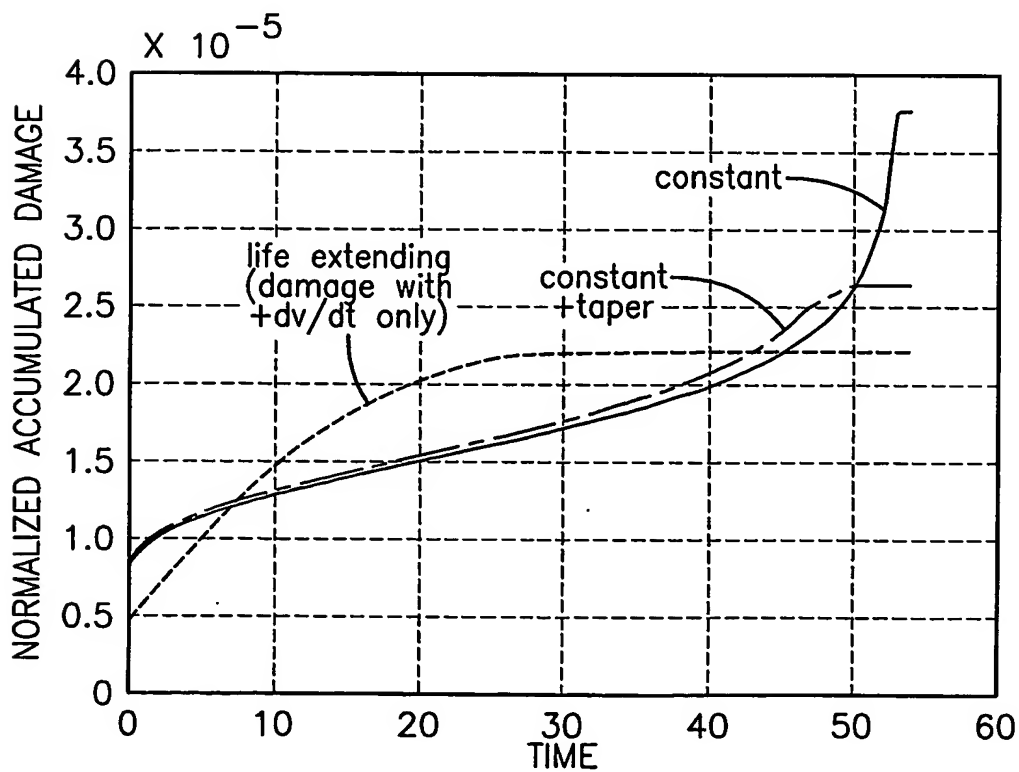


FIG-17D

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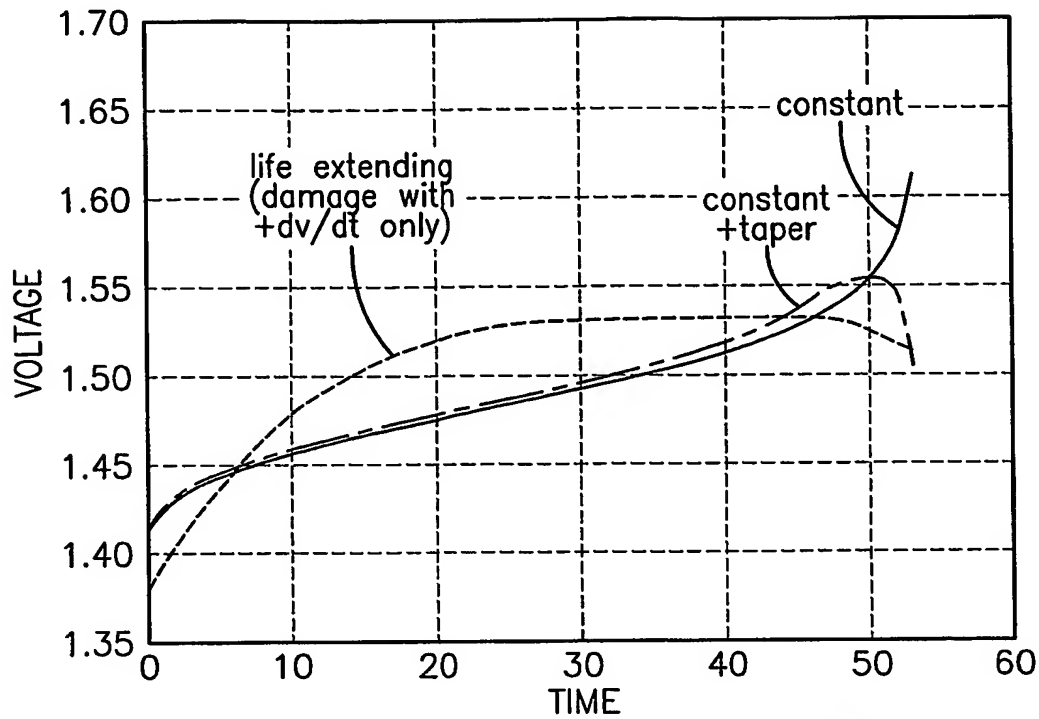


FIG-17E

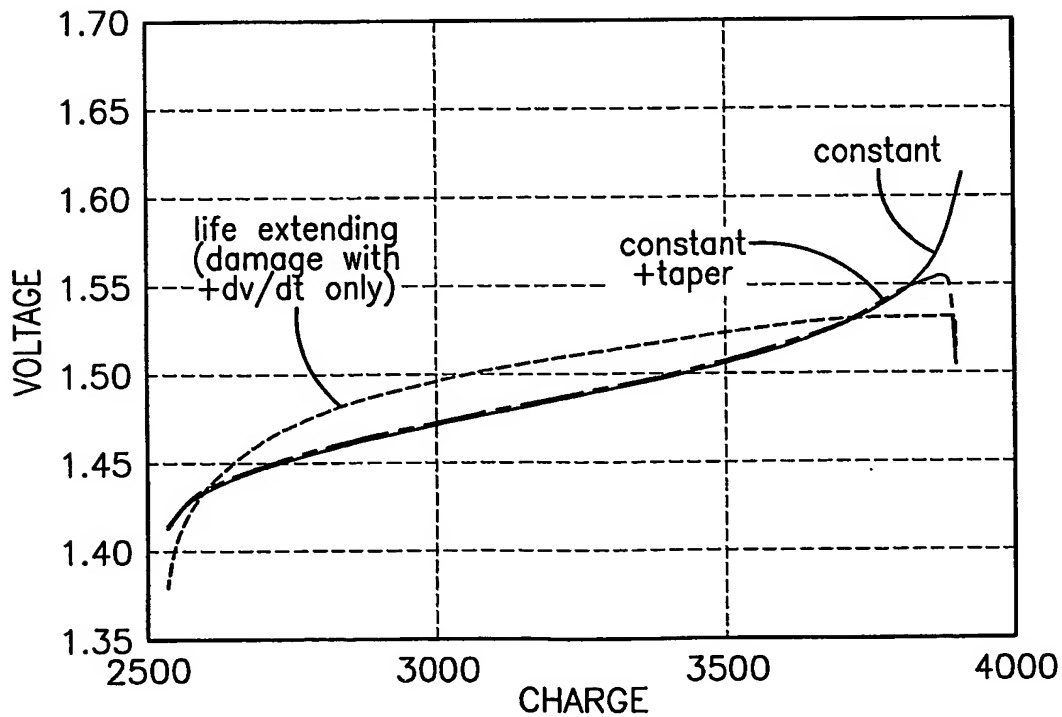


FIG-17F

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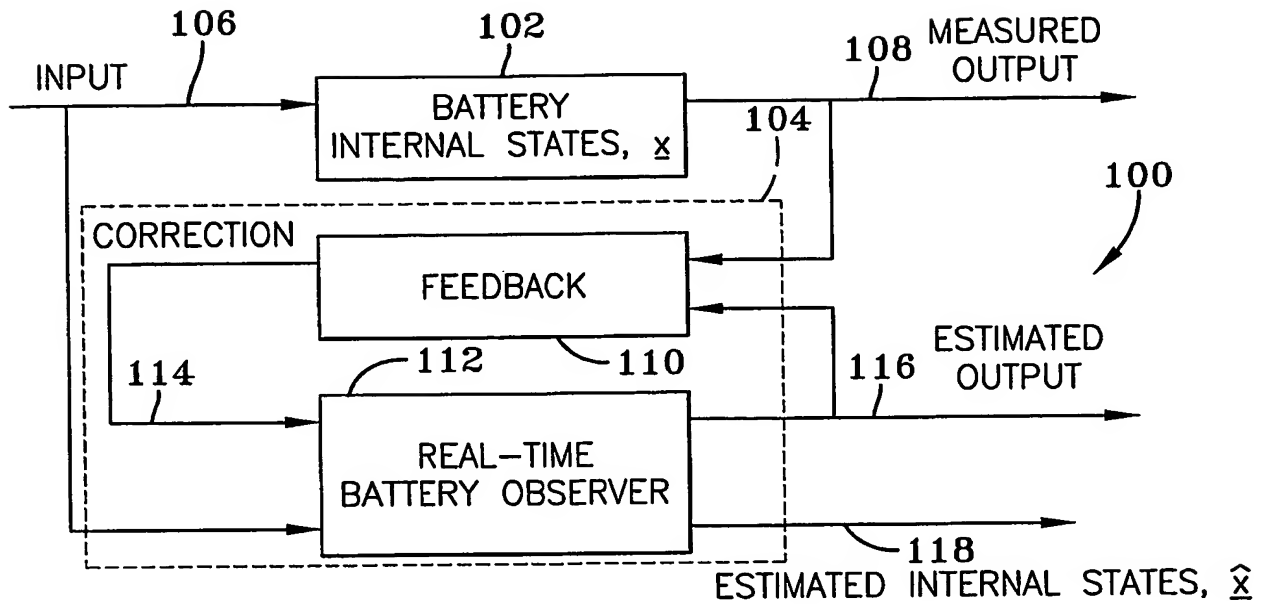


FIG-18

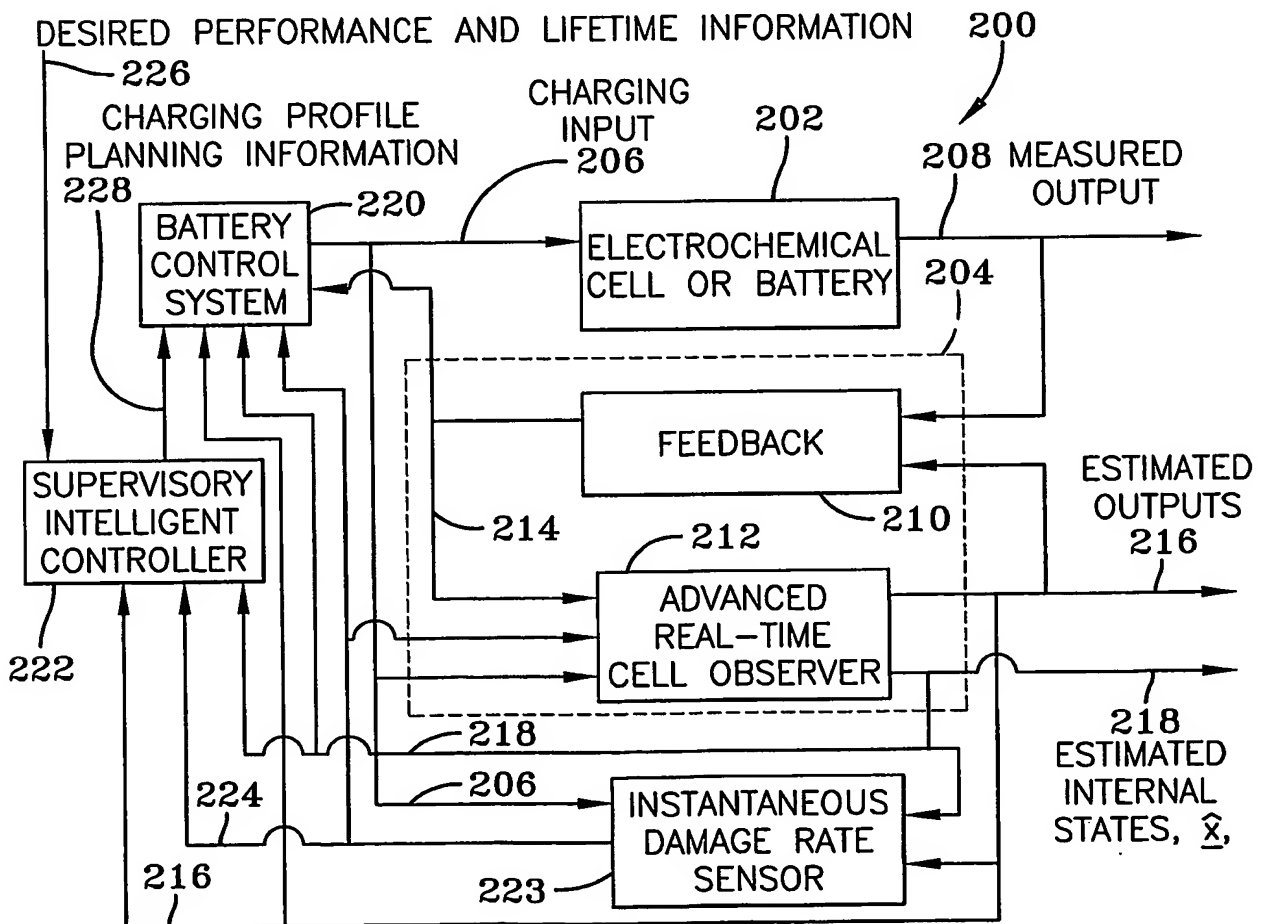


FIG-19